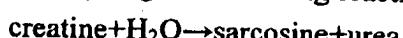


ABSTRACT

A creatine amidinohydrolase having the following physicochemical properties:

Action: catalyzing the following reaction:



Optimum temperature: about 40-50° C

Optimum pH: pH about 8.0-9.0

Heat stability: not more than about 50° C. (pH 7.5, 30 min)

K_m value for creatine in a coupling assay using a sarcosine oxidase and a peroxidase: about 3.5-10.0 mM

Molecular weight: about 43,000 (SDS-PAGE)

Isoelectric point: about [3.5] 4.5,

a method for producing said enzyme, comprising culture of microorganism producing said enzyme, a method for the determination of creatine or creatinine in a sample using said enzyme, and a reagent therefor.